### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018212 Address: 333 Burma Road **Date Inspected:** 19-Nov-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Huang Min No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Subassembly

## **Summary of Items Observed:**

On this day CALTRANS Office of Structural Materials (OSM) Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

### OBG BAY 8

This QA observed ZPMC qualified welding personnel identified as 040736 perform Flux Core Arc Welding (FCAW) on Bike Path components. The weld joint is identified as BK004A3-062-025. ZPMC QC Mr. Liu Fa Wen was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

#### OBG BAY 7

This QA observed ZPMC qualified welding personnel identified as 205386 perform Flux Core Arc Welding (FCAW) on Barrier Rail components. The weld joint is identified as W2-SB9-069-113. ZPMC QC Mr. Shen Jian Guo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2332-TC-P4-F.

This QA observed ZPMC qualified welding personnel identified as 067447 perform Flux Core Arc Welding (FCAW) on Barrier Rail components. The weld joint is identified as W2-SB9-069-114. ZPMC QC Mr. Shen Jian

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Guo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2332-TC-P4-F.

This QA observed ZPMC qualified welding personnel identified as 053742 perform Flux Core Arc Welding (FCAW) on Barrier Rail components. The weld joint is identified as W2-SB10-038-126. ZPMC QC Mr. Shen Jian Guo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2332-TC-P4-F.

## OBG BAY 6

This QA observed ZPMC personnel heat straightening Orthotropic Box Girder (OBG) deck panel identified as DP3168B-001, weld joints 098, 099, 103, 104, 106, 107, 109, 110, 112, 113, 115, 116, 123, 139, 137, 138, 139, and 140. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Li Jia was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report HSR1 (B)-0433.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer